

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/049651 A2

(51) International Patent Classification⁷: **C07K 14/82**,
14/705, 16/32, C12N 5/12, G01N 33/574, A61K 39/395,
C12N 15/11, A61P 35/00

(74) Agent: **PURDY, Hugh, Barry**; Murgitroyd & Company
Limited, Scotland House, 165-169 Scotland Street, Glas-
gow G5 8PL (GB).

(21) International Application Number:
PCT/GB2004/004788

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date:
15 November 2004 (15.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0326578.2 14 November 2003 (14.11.2003) GB

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **THE
QUEEN'S UNIVERSITY OF BELFAST** [GB/GB];
University Road, Belfast BT7 1NN (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **MULLIGAN, Karl**
[GB/GB]; 9 Ardenlee Court, Ravenhill Road, Belfast
BT6 8QE (GB). **MCCORMICK, Derek** [GB/GB]; 25
Greystown Park, Upper Malone, Belfast BT9 6UP (GB).
JOHNSTON, Patrick [GB/GB]; 10 Graland Hill, Four
Winds, Belfast BT8 6IL (GB).

Published:

— *without international search report and to be republished
upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: **CANCER DIAGNOSIS AND THERAPY**

(57) Abstract: The invention relates to an oncofetal glycoprotein, referred to as MQ-1, nucleic acid sequences coding for the protein, and antibodies which bind specifically to the protein. Also described is a hybridoma capable of producing monoclonal antibodies which bind specifically to the protein of the invention. Methods, and kits, for diagnosing and treating cancer using the antibodies of the invention are also described. Anti-sense polynucleotides are also described, as are methods for inducing apoptosis in cells which express MQ-1.



WO 2005/049651 A2